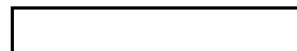


PHOTOGRAPHIC INTERPRETATION REPORT



POSSIBLE VARIANTS OF
CROSS LEGS RADARS

25X1

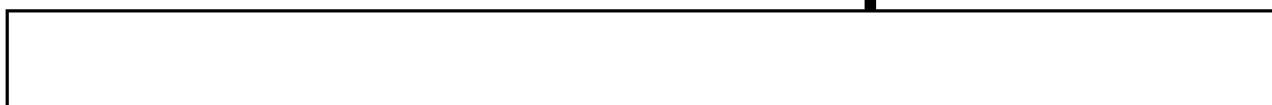


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Declass Review by NIMA / DoD

GROUP 1 EXCLUDED FROM
AUTOMATIC DOWNGRADING
AND DECLASSIFICATION

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INSTALLATION OR ACTIVITY NAME

Possible Variants of CROSS LEGS Radar

COUNTRY

CH

UTM COORDINATES

NA

GEOGRAPHIC COORDINATES

See Below

CATEGORY

None

BE NUMBER

None

COMIREX NO.

None

NIETB NO.

None

MAP REFERENCE

NA

25X1C
25X1A

NEGATION DATE (if required)

None

REQUIREMENT

NPIC PROJECT

210094

25X1A

ABSTRACT

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This report has been accomplished in response to [] which specified areas to be examined to determine whether there are more than two variations of the CROSS LEGS radar, with particular emphasis on whether BIG BAR/BAR LOCK radars were being cannibalized in quantity. Twenty-nine areas of specific interest to the requester were examined, and CROSS LEGS were identified at ten of these. The areas referenced are tabulated at the end of this report.

The Chinese Communists have produced three native-designed radars which have been identified on photography: the MOON CONE, CROSS SLOT, and CROSS LEGS. All other Chinese radars are either of foreign origins or copies of foreign radars, i.e., TOKEN, FAN SONG, MOON FACE/SCR270. This report deals with the CROSS LEGS and its possible variants.

SUMMARY AND CONCLUSIONS

This analysis was conducted to determine whether a variant of the CROSS LEGS radar might be a cannibalization of the BIG BAR/BAR LOCK radar.

A known example of where this event has occurred has led to the speculation that this practice may be widespread.

The results of this investigation show that the one radar can be easily mistaken for the other, and this is the prevalent case rather than widespread cannibalization.

BASIC DESCRIPTION

25X1D

The CROSS LEGS radar is named for the characteristic support struts which form a cross-like pattern. The antenna appears to be an open-mesh cut parabolic screen measuring [] the best example of which is seen at Lishui, China (Figure 1).

25X1D

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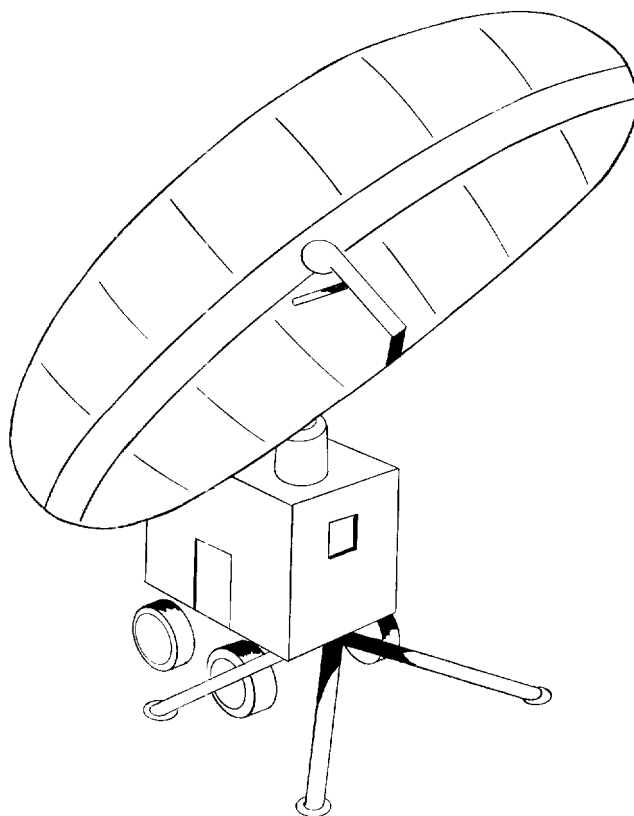
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25X1

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25X1D

There have been speculations that a variant of the CROSS LEGS radar may be a cannibalization of the BIG BAR/BAR LOCK radar sail. The fact that these radars have approximately the same measurements, 35 feet long for BIG BAR/BAR LOCK and [] for CROSS LEGS, and that both have cut parabolic reflectors, increases the chances of mistaking one for the other. Although an example of this type of cannibalization has been observed before at the Tachiu electronic intercept site, large scale cannibalization of other radars to produce CROSS LEGS radar seems unlikely since the widespread deployment would require the unnecessary cannibalization of large numbers of surplus radars. Also, because China has the industrial capability to produce native-design radars, there is no apparent need to resort to cannibalization to build radars in large numbers.



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FIGURE 1. CROSS LEGS RADAR.

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25X1

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25X1
25X1A

Search areas where CROSS LEGS radars were identified:

Ningming (22-10-35N 107-08-30E)

Mission

25X1D
25X1D

Ssumao (22-53-10N 100-59-10E)

Mission

25X1D

Huian (25-08N 118-50E)

Mission

25X1D

Shantou (23-26N 116-38E)

Mission

25X1D

Chihhsia (37-13-30N 120-44-25E)

Mission

25X1D

Chiangchen (22-42-10N 101-53-30E)

Mission

25X1D
25X1D

Mengla (21-27-50N 101-33-30E)

Mission

25X1D

Areas searched where CROSS LEGS radars were not identified:

Kuantien (40-51N 124-43E)

Kushantzu (42-16N 126-37E)

Paitientu (42-31N 123-37E)

Takushan (37-52N 123-37E)

Maian (36-42N 115-13E)

Kuantao (36-40N 115-13E)

Hofei (31-52N 117-17E)

Fassuchou (30-09N 114-08E)

Tunghuangtien (31-45N 114-00E)

Leiyang (26-35N 112-53E)

Wangmuth (25-30N 115-00E)

Chinfengch (26-00N 119-33E)

Hsintsun (25-23N 110-29E)

Kengma (23-32N 099-25E)

Huangtsaoting (23-05N 114-47E)

Ladrone FSL (21-56N 113-43E)

Wushihchiang (20-30N 110-08E)

Chinghsi (23-00N 106-25E)

Hsiyangchuang (31-48N 119-23E)

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